

Federal Communications Commission

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility ID: File	73910 000002	Service: DTV 8030	Call Sign:	WPXI	Channel: 23 (UHF)
Number:					
FRN: 00 '	14361083	Date	09/14		
		Submitted:	/2018		

Applicant Name, Type, and Contact Information

Information Applicant Address Phone Email **Applicant Type** WPXI, LLC Director of +1 (412) Limited Liability doe@wpxi. Doing Business As: Engineering 237-1100 com Company WPXI, LLC 4145 **EVERGREEN** ROAD PITTSBURGH, PA 15214 **United States**

Reimbursement Contact Name and Information Reimbursement Contact Information

Applicant	Address	Phone	Email
[Confidential]			

Preparer Contact Information	Preparer Contact Nan	parer Contact Name and Information			
	Applicant	Address	Phone	Email	
	Otto Schellin Director of Engineering WPXI, LLC	Otto Schellin 4145 Evergreen Road Pittsburgh, PA 15214 United States	+1 (412) 237-1184	doe@wpxi.com	

Broadcaster	Question	Response
Information and Transition Plan	Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	No
	Briefly describe transition plan	Build CH23 xmtr, replace ant stack with CH23 ant mounted on pole. Use the CH48 main feedline for a new CH23 aux ant. Install a new feedline for the CH23 main ant. Remain on air using the CH48 aux ant.After transition, remove the CH48 aux ant and feedline.

Transmitters	Section	Question	Response
	Transmitter Related Expenses	Do you have transmitter related expenses?	Yes

Auxiliary	Existing Transmitter Infor	mation			
Transmitter	Section	Question	Response		
	Existing Transmitter Description	Type of change	Purchase New		
		Use	Auxiliary (Backup)		
		Question Responsibility Type of change Purch New Use Auxilia (Back) Description of Use Auxilia (Back) Ownership Owner Owner N/A Site N/A Is this transmitter currently shared with another station? No Is this transmitter currently in operating condition? Yes Manufacturer DHDE Year 2008 Type Solid			
		Ownership	Owned		
		Owner	N/A		
		Site	N/A		
		-	No		
			Yes		
	Existing Transmitter	Manufacturer			
	Manufacturer and Type	Model	DHD60P2		
		QuestionResponType of changePurcha NewUseAuxilia (BackuDescription of UseAuxilia (BackuOwnershipOwnerOwnerN/ASiteN/AIs this transmitter currently shared with another station?NoIs this transmitter currently in operating condition?YesManufacturerUherYear2008TypeSolid S			
			Туре	Solid State	
		Solid State Cooling	Air Cooled		
		Solid State Power Capacity	14 kW		

Existing Transmitter Information

Auxiliary	New Transmitter Costs				
Transmitter	Section	Question	Response		
	New Transmitter	Use	Auxiliary (Backup)		
		Change Type	Purchase New		
		Is this a request for upgraded equipment?	No		
		Manufacturer			
		Model Transmitter Type	ULXTE-24		
			Solid State		
	Solid State Cooling Solid State Power capacity	Liquid Cooled			
		Solid State Power capacity	16.1 kW		
		Justification for New Transmitter	Current auxiliary transmitter cannot be retuned.		

Auxiliary Other Transmitter Costs

Transmitter	Section	Question	Response
	Electrical Service	Service Entrance (3 phases 800A 208V)	No
		Switchgear (industrial 800 amp)	No
		Transformer (480V) Power Rigid Conduit and Wiring	No
			N/A
			No
		Size	N/A
		Length	N/A
		Other Electrical Service	Yes

	Description	480V transformers, raceway, wire, distribution panels, conduit, pump wiring and labor to provide electrical service. Cost represents 30% of total quoted amount to account for aux transmitter needs.
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Туре	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Auxiliary	Other Transmitter Cost Not Listed	
Transmitter	Name	De

Description

Exterior Foundation	Concrete pads for heat exchangers. 50% of total on the main transmitter and 50% on the aux transmitter.
Interior Work	Labor to unload and position all transmitter equipment, framing to install RF filters, patch previous transmission line entry points. 50% of total on the main transmitter and 50% on the aux transmitter.

Primary	Existing Transmitter Information			
Transmitter	Section	Question	Response	
	Existing Transmitter Description	Type of change	Purchase New	
		Use	Primary (Main)	
		Description of Use	N/A	
		Ownership	Owned	
		Owner	N/A	
		Site	N/A	
		Is this transmitter currently shared with another station?	No	
		Is this transmitter currently in operating condition?	Yes	
	Existing Transmitter	Manufacturer		
	Manufacturer and Type	Model	CD200P2	
		Year	1999	
		Туре	Inductive Output Tube	
		IOT Power Type	Тwo	
		Power Capacity	50 kW	

Existing Transmitter Information

Primary	New Transmitter Costs			
Transmitter	Section	Question	Response	
	New Transmitter	Use	Primary (Main)	
		Change Type	Purchase New	
		Is this a request for upgraded equipment?	No	
		Manufacturer		
		Model	ULXTED-60	
		Transmitter Type	Solid State	
		Solid State Cooling	Liquid Cooled	
		Solid State Power capacity	38.4 kW	
		Justification for New Transmitter	Current transmitter cannot be retuned to the new channel assignment. Also, IOT replacement transmitter would be more costly.	

Primary Other Transmitter Costs

Transmitter	Section	Question	Response
	Electrical Service	Service Entrance (3 phases 800A 208V)	No
		Switchgear (industrial 800 amp)	No
		Transformer (480V)	No
		Power	N/A
		Rigid Conduit and Wiring	No

	Size	N/A
	Length	N/A
	Other Electrical Service	Yes
	Description	480V transformers, raceway, wire, distribution panels, conduit, pump wiring and labor to provide electrical service. Cost represents 70% of total quoted amount to account for main transmitter needs.
HVAC Service	Does the replacement transmitter require HVAC Service?	Yes
	Туре	Heating and Cooling
	Size	20 tons
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Primary Transmitter	Other Transmitter Cost Not Listed			
	Name	Description		
	Spare Transmitter Parts	WPXI currently has an inventory of replacement amplifiers, power supplies, circuit breakers, circuit assemblies and a manufacturer supplied parts kit for our main transmitter. These parts are not compatible with the new transmitter and must be replaced.		
	Spare Cooling System Parts	To replace currently existing spare parts inventory on our cooling system. These parts are not compatible with the new transmitter and must be replaced.		
	Interior Work	Labor to unload and position all transmitter equipment, framing to install RF filters, patch previous transmission line entry points.50% of total on the main transmitter and 50% on the aux transmitter.		
	Exterior Foundation	Concrete pads for heat exchangers 50% of total on the main transmitter and 50% on the aux transmitter.		

Antennas Section		Question	Response
Antenna Rela	ated Expenses	Do you have antenna related expenses?	Yes

Auxiliary Antenna	Existing Antenna Information			
	Section	Question	Response	
	Existing Antenna Description	Type of change	Purchase New	
		Antenna Use	Auxiliary (Backup)	
		Description of Use	Auxiliary (Backup)	
		Ownership	Owned	
		Owner	N/A	
		Site	N/A	
		Is the existing antenna shared with another station or stations?	No	
		Is the existing antenna directional?	No	
		Is antenna in operating condition?	Yes	
		Is antenna located on or in close proximity to an antenna farm?	No	
	Existing Antenna Manufacturer and Type	Class	Full Power	
		Mounting	Side Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Horizontal	
		Туре	Slotted Coaxial	
		Number of Stations Supported	N/A	
		Number of Panels	N/A	
		Design power capacity in use	N/A	
		Lower Limit	N/A	
		Upper Limit	N/A	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	1000.0 kW	

Manufacturer	
Model	TFU- 30DSC-R O4
Year	2008

Auxiliary	New Antenna Costs			
Antenna	Section	Question	Response	
	New Antenna Description	Use	Auxiliary (Backup)	
		Description of Use	Auxiliary (Backup)	
		Change Type	Purchase New	
		Is this a request for upgraded equipment?	No	
		Ownership	Owned	
		Owner	N/A	
		Is antenna shared?	No	
		Is antenna directional?	No	
		Will antenna be located on or in close proximity to an antenna farm?	No	
	New Antenna	Class	Full Power	
	Manufacturer and Types	Mounting	Side Mount	
		Antenna position in stack	Not in Stack	
		Polarization	Horizontal	
		Туре	Slotted Coaxial	
		Number of Stations Supported	N/A	
		Number of Panels/Bays	N/A	
		Lower Limit	N/A	
		Upper Limit	N/A	
		Design power capacity in use	N/A	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	1000.0 kW	
		Manufacturer		

Model	TFU- 28DSC-R O4
Year	2018
Justification for New Antenna	Current antenna can not be tuned to the new channel.

Auxiliary Other Antenna Costs

Antenna

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No
	Туре	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
	Broadband or Single Channel?	Single Channel
	Feed Line Size	6 1/8 inches inches
Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	Yes
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No

Sweep	Test
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Auxiliant Other Antenna Cost Not Listed

AuxiliaryOther Antenna CostAntennaInformation not provided.

Primary	Existing Antenna Information			
Antenna	Section	Question	Response	
	Existing Antenna Description	Type of change	Purchase New	
		Antenna Use	Primary (Main)	
		Description of Use	N/A	
		Ownership	Owned	
		Owner	N/A	
		Site	N/A	
		Is the existing antenna shared with another station or stations?	No	
	Is the existing antenna directional? Is antenna in operating condition? Is antenna located on or in close proximity to an antenna farm?	Is the existing antenna directional?	No	
		Is antenna in operating condition?	Yes	
		No		
	Existing Antenna	Class	Full Power	
	Manufacturer and Type	Mounting	Top Mount	
		Antenna position in stack	Bottom	
		Polarization	Horizontal	
		Туре	Slotted Coaxial	
		Number of Stations Supported	N/A	
		Number of Panels	N/A	
		Design power capacity in use	N/A	
		Lower Limit	N/A	
		Upper Limit	N/A	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	1000.0 kW	

Manufacturer	
Model	TFU- 30GBH-R O6
Year	1999

Primary	New Antenna Costs			
Antenna	Section	Question	Response	
	New Antenna Description	Use	Primary (Main)	
		Description of Use	N/A	
		Change Type	Purchase New	
		Is this a request for upgraded equipment?	No	
		Ownership	Owned	
		Owner	N/A	
		Is antenna shared?	No	
		Is antenna directional?	No	
		Will antenna be located on or in close proximity to an antenna farm?	No	
	New Antenna Manufacturer and Types	Class	Full Power	
		Mounting	Top Mount	
		Antenna position in stack	Тор	
		Polarization	Horizontal	
		Туре	Slotted Coaxial	
		Number of Stations Supported	N/A	
		Number of Panels/Bays	N/A	
		Lower Limit	N/A	
		Upper Limit	N/A	
		Design power capacity in use	N/A	
		Other Antenna Type	N/A	
		ERP: (Effective Radiated Power)	1000.0 kW	
		Manufacturer		
			1	

Model	TFU-27ETT /VP-R O6
Year	2018
Justification for New Antenna	Current antenna can not be tuned to the new channel.

Primary Antenna	Other Antenna Costs		
	Section	Question	Response
	Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	No
		Туре	
		Number of channels supported	N/A
		Frequencies of channels supported	N/A
		Frequency	N/A
		Do you need a combiner output splitter /switcher for dual feed lines?	N/A
	Elbow Complex	Do you require the separate purchase of the Elbow Complex?	Yes
		Broadband or Single Channel?	Single Channel
		Feed Line Size	6 1/8 inches inches
	Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	No
	Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	No
	Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

PrimaryOther Antenna Cost Not ListedAntennaInformation not provided.

Transmissior	n Seffien	Question	Response
	Transmission Line Related Expenses	Do you have transmission line related expenses?	Yes

Auxiliary	Existing Transmission Line			
Transmissio	n Line Section	Question	Response	
	Existing Transmission Line Description	Type of change	Purchase New	
		Use	Auxiliary (Backup)	
		Description of Use	Auxiliary (Backup)	
		Ownership	Owned	
		Owner	N/A	
		Site	N/A	
		Is the existing transmission line shared with another station or stations?	No	
		Is Transmission Line in operating condition?	Yes	
	Existing Transmission	Manufacturer		
	Line Manufacturer and Type	Туре	Rigid	
		Diameter	6 1/8 inches	
		Other Diameter	N/A	
		Segment Length	20 inches	
		Other Segment Length	N/A	
		Number of parallel runs	1	
		Length	600 feet per run	

Auxiliary	New Transmission Line			
Transmissio	n section	Question	Response	
	New Transmission Line Costs	Use	Auxiliary (Backup)	
		Description of Use	Auxiliary (Backup)	
		Change Type	Purchase New	
		Is this a request for upgraded equipment?	No	
		Туре	Rigid	
		Diameter	6 1/8 inches	
		Other Diameter	N/A	
		Segment Length	20 inches	
		Other Segment Length	N/A	
		Number of parallel runs	1	
		Length	300 feet per run	
		Justification for New Transmission Line	Need to re- route line to new entry point on building.	

Other Transmission Line Expenses Not Listed Auxiliary Transmission Line Description Ice Bridge

Needed to protect new transmission line from falling ice off the tower. Also includes concrete foundation necessary for the ice bridge installation. 50% of total on the main transmitter and 50% on the aux transmitter.

ransmissio	Section	Question	Response
	Existing Transmission Line Description	Type of change	Purchase New
		Use	Primary (Main)
		Description of Use	N/A
		Ownership	Owned
		Owner	N/A
		Site	N/A
		Is the existing transmission line shared with another station or stations?	No
		Is Transmission Line in operating condition?	Yes
	Existing Transmission	Manufacturer	
	Line Manufacturer and Type	Туре	Rigid
		Diameter	6 1/8 inches
		Other Diameter	N/A
		Segment Length	20 inches
		Other Segment Length	N/A
		Number of parallel runs	1
		Length	850 feet per run

Primary Existing Transmission Line

Primary	New Transmission Line		
Transmissio	Section	Question	Response
	New Transmission Line Costs	Use	Primary (Main)
		Description of Use	N/A
		Change Type	Purchase New
		Is this a request for upgraded equipment?	No
		Туре	Rigid
		Diameter	6 1/8 inches
		Other Diameter	N/A
		Segment Length	20 inches
		Other Segment Length	N/A
		Number of parallel runs	1
		Length	921 feet per run
		Justification for New Transmission Line	The current line will be in use for the current channel. We will need to install new line for new channel.

Primary	Other Transmission Line Expenses Not Listed		
Transmissio	nName	Description	
	Ice Bridge	Needed to protect new transmission line from falling ice off the tower. Also includes concrete foundation necessary for the ice bridge installation. 50% of total on the main transmitter and 50% on the aux transmitter.	

Tower	Section	Question	Response
Equipment And Rigging Costs	Tower Equipment or Rigging Costs Changes	Do you have tower equipment or rigging costs changes?	Yes

Existing Tower

Primary	Existing Tower			
Tower	Section	Question	Response	
	Existing Tower	Type of change	Modify Existing	
	Description	Tower Use	Primary (Main)	
		Description of Use	N/A	
		Ownership	Leased	
		Is this tower consider Complex?		
		Is this tower currently shared with any other stations?	Yes	
		One or more FM, AM or TV radio broadcaster(s)	Yes	
		Others Types of Users	Yes	
		Is tower documented for structural analysis?	Yes	
		Is tower compliant with Rev G?	Yes	
	Existing Tower	Do you have a tower registration number?	Yes	
	Structure Registration	ASR Number	1032235	
	Coordinates (NAD83 (Latitude (NAD83)	40° 27' 47.7" N-	
	North American Datum of 1983))	Longitude (NAD83)	080° 00' 15.5" W-	
		Overall Structure Height	846.77 feet	
		Support Structure Height	741.46 feet	
		Ground Elevation Above Mean Sea Level (AMSL)	1200.12 feet	

Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
Tower Owner	IWG Towers Assets II, LLC
Date Constructed	06/01/1967

FM, AM or TV radio broadcasters. Facility ID's, Call Signs and Services of other broadcast stations with whom the tower is shared

Facility ID	Call Sign	Service
55709	WSHH	FM
59968	WWSW-FM	FM

Other Types of Users

Users

WYC531 Two Way

WQNF304 Two Way

Primary Tower Modification Costs

Tower

Section	Question	Response
Engineering Study	Please what type of engineering study is required, if any:	Study needed for documented tower
Tower Reinforcements	Please select whether tower reinforcements are needed:	No reinforcements needed

Primary Tower	Tower Rigging Costs					
	Section	Question	Response			
	Tower Rigging Costs	Complex Tower	Other			
	Helicopter Services Required	Are helicopter services required?	No			

Other Tower Expenses Not Listed

Primary Tower

Name	Description
Primary Antenna Support Structure	40.8' monopole and 5' wedding cake to support primary top-mount antenna

Outside	Section	Question	Response
Professional	Services Costs Outside Project Management Services	Do you require outside project management services?	Yes
		Number of Hours	480
		Explanation	Project manager is required to supervise various outside contractors and be the point person to represent the station.
	Outside RF consulting Engineering Services	Perform engineering study for new channel assignment and antenna development	Yes
		Prepare engineering section of Form FCC Construction Permit Application	Yes
		For Auxiliary Facility	Yes
		For Main Facility	Yes
		Prepare engineering section of Form FCC License to Cover Application	Yes
		For Auxiliary Facility	Yes
		For Main Facility	Yes
		Prepare request for Special Temporary Authority	No
		Quantity	N/A
		Do you have Distributed Transmission System engineering services?	N/A
		Critical Facility	N/A
		Terrain-Shielded Facility	N/A
	Attorney and Other Outside Consulting Services	Prepare and file Form FCC Construction Permit Application	Yes

	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	Yes
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	No
	Quantity	N/A
	NEPA Section 106 environmental review	Yes
	Environmental Assessment	Yes
	ASR Modification	No
	FAA Consultation (including preparation of FAA Form 7460)	No
	Negotiation of Lease and other Matter for Shared Locations	No
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	No
RF Field Engineering Services	Comprehensive coverage verification via field study	Yes
	RF exposure measurements	Yes
	Additional Field Engineering Service	No
	Number of Days	N/A
	Justification	N/A

Outside Other Professional Services Expenses Not Listed Professional Services roopstsided.

Other	Section	Question	Response
Expenses	AM Pattern Disturbance	Is an Impact Study needed?	No
		Is Remediation needed?	No
	Facility Expenses	Name	N/A
		Other Distributed Transmission System Expenses Not listed	N/A
		Name	N/A
		Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
	Permit and Filing Costs	Local Zoning	No
		Non-zoning permits	No
		BLM or NFS Coordination	No
		FCC Construction Permit Minor Change	No
		FCC License to Cover Application	Yes
		FCC Special Temporary Authority Application	No
	Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
		Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	Yes
		Does this relocation require Equipment Storage?	No
		Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
		Does this relocation require MVPD Notification of a Channel Change?	Yes

Other Expenses Not Listed

Expenses Information not provided.

Transmitters

Cost Information

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter ULXTED-60	\$1,848,961.00	\$1,628,557.42		\$431,075.14	
Exterior Foundation	\$54,271.00	\$54,271.00	50% of quoted cost of exterior concrete pad. This is for the transmitter's heat exchangers and ice protection. 50% of total on the main transmitter and 50% on the aux transmitter	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	\$1,473,000.00	\$1,304,225.42	N/A	\$431,075.14	N/A

Other Electrical Service: 480V transformers, raceway, wire, distribution panels, conduit, pump wiring and labor to provide electrical service. Cost represents 70% of total quoted amount to account for main	\$119,000.00	\$119,000.00	70% of total electrical cost quote for the main transmitter, remaining 30% is listed under auxiliary transmitter.	N/A	N/A
transmitter needs.					
20 Ton system	\$115,500.00	\$63,871.00	N/A	N/A	N/A
Spare Cooling System Parts	\$16,000.00	\$16,000.00	To maintain an inventory of critical cooling system replacement parts equivalent to our current inventory. The current inventory of parts are not compatible with the new transmitter and must be replaced.	N/A	N/A

Spare Transmitter Parts	\$68,000.00	\$68,000.00	WPXI currently has an inventory of replacement amplifiers, power supplies circuit breakers, circuit assemblies and a manufacturer supplied parts kit for our main transmitter. These parts are not compatible with the new transmitter	\$0.00	N/A
			and must be		
Interior Work	\$3,190.00	\$3,190.00	replaced. 50% of quoted cost for interior work including labor to unload and position all transmitter equipment, framing to install RF filters, patch previous transmission line entry points. 50% of total on the main transmitter and 50% on the aux transmitter	N/A	N/A

Auxiliary Transmitter ULXTE-24	\$792,461.00	\$653,854.87		\$179,231.29	
Interior Work	\$3,190.00	\$3,190.00	50% of quoted cost for interior work including labor to unload and position all transmitter equipment, framing to install RF filters, patch previous transmission line entry points. 50% of total on the main transmitter and 50% on the aux transmitter.	N/A	N/A

Other Electrical Service: 480V transformers, raceway, wire, distribution panels, conduit, pump wiring and labor to provide electrical service. Cost represents 30% of total quoted amount to account for aux transmitter needs.	\$51,000.00	\$51,000.00	30% of total electrical cost quote for the aux transmitter, remaining 70% is listed under main transmitter.	N/A	N/A
Exterior Foundation	\$54,271.00	\$54,271.00	50% of quoted cost of exterior concrete pad. This is for the transmitter's heat exchangers and ice protection. 50% of total on the main transmitter and 50% on the aux transmitter	N/A	N/A
UHF - Liquid Cooled Solid State Transmitter 14.2 - 20 kW	\$684,000.00	\$545,393.87	N/A	\$179,231.29	N/A
Sub-total	\$2,641,422.00	\$2,282,412.29	N/A	\$610,306.43	N/A

Total for all	\$4,283,096.00	\$3,838,033.39	N/A	\$610,306.43	N/A
systems					

Actual Information Description	File Name	
Exterior Foundation	Information not provided.	
UHF - Liquid Cooled Solid State Transmitter 35 - 50 kW	Component Description: Amount:	Down payment (1 /3 of total not including estimated shipping) for main transmitter \$431,075.14
Other Electrical Service: 480V transformers, raceway, wire, distribution panels, conduit, pump wiring and labor to provide electrical service. Cost represents 70% of total quoted amount to account for main transmitter needs.	Information not provided.	
20 Ton system	Information not provided.	
Spare Cooling System Parts	Information not provided.	
Spare Transmitter Parts	Information not provided.	
Interior Work	Information not provided.	
Interior Work	Information not provided.	
Other Electrical Service: 480V transformers, raceway, wire, distribution panels, conduit, pump wiring and labor to provide electrical service. Cost represents 30% of total quoted amount to account for aux transmitter needs.	Information not provided.	

UHF - Liquid Cooled Solid		
State Transmitter 14.2 - 20	Component Description:	Down payment (
kW		/3 of total cost
		before estimated
		shipping) for
		WPXI-TV Aux
		Transmitter
	Amount:	\$179,231.29

Antennas

Cost Information

Description Primary Antenna TFU-27ETT /VP-R O6	Predetermined Cost Estimate \$266,030.00	Estimated Cost \$242,286.00	Estimated Cost Justification	Actual Cost \$0.00	Actual Cost Justification
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$12,135.00	Direct quoted cost from Dielectric. Is \$135.00 over predetermined estimate.	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
UHF - High Power Top Mount (200-1000 kW), One station antenna, horizontally polarized	\$247,000.00	\$223,751.00	N/A	N/A	N/A
Auxiliary Antenna TFU- 28DSC-R O4	\$203,880.00	\$200,148.00		\$0.00	

Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$21,750.00	N/A	\$0.00	N/A
Elbow complex, single channel, at antenna input, per 6 1/8. feedline (if needed)	\$12,300.00	\$10,298.00	N/A	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
UHF - High Power, Side Mount, basic slot antenna, 1000 kW input, horizontally polarized	\$161,700.00	\$161,700.00	There is no predetermined cost available for the auxiliary antenna. This cost was based on attached quote 700361CMZ-2 WPXI Cox Aux.pdf.	N/A	N/A
Sub-total	\$469,910.00	\$442,434.00	N/A	\$0.00	N/A
Total for all systems	\$4,283,096.00	\$3,838,033.39	N/A	\$610,306.43	N/A

Transmission Line

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmission Line	\$210,562.00	\$176,760.10		\$0.00	
Ice Bridge	\$24,520.00	\$24,520.00	50% of cost of ice bridge and concrete foundation. 50% of total on the main transmitter and 50% on the aux transmitter.	N/A	N/A
Rigid Transmission Line - copper, 6 1/8"	\$186,042.00	\$152,240.10	N/A	N/A	N/A
Auxiliary Transmission Line	\$85,120.00	\$82,120.00		\$0.00	
Rigid Transmission Line - copper, 6 1/8"	\$60,600.00	\$57,600.00	N/A	N/A	N/A

Ice Bridge	\$24,520.00	\$24,520.00	50% of cost of ice bridge and concrete foundation. 50% of total on the main transmitter	N/A	N/A
Sub-total	\$295,682.00	\$258,880.10	and 50% on the aux transmitter.	\$0.00	N/A
Total for all systems	\$4,283,096.00	\$3,838,033.39	N/A	\$610,306.43	N/A

Tower Equipment and Rigging Costs

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower GTOWER	\$582,745.00	\$572,945.00		\$0.00	
Primary Antenna Support Structure	\$149,145.00	\$149,145.00	No predetermined cost available. This is for the primary antenna support structures needed including a 40.8' monopole and a 5' wedding cake which are not currently part of tower.	N/A	N/A
Complex Tower (includes, for example, those with candelabras and/or stacked antennas)	\$421,000.00	\$409,500.00	N/A	N/A	N/A
Structural engineering tower load study for well documented tower	\$12,600.00	\$14,300.00	Required a site visit and climb.	N/A	N/A
Sub-total	\$582,745.00	\$572,945.00	N/A	\$0.00	N/A

Outside Professional Services

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Outside Professional Services	\$228,165.00	\$216,750.00		\$0.00	
Environmental Assessment, if triggered by NEPA Section 106 review or for certain structures over 450 feet	\$10,520.00	\$10,000.00	N/A	N/A	N/A
NEPA Section 106 environmental review, if needed	\$6,310.00	\$6,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	N/A	N/A
Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application	\$4,210.00	\$4,000.00	N/A	N/A	N/A

Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	N/A	N/A
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	N/A	N/A
RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application	\$2,105.00	\$2,000.00	N/A	N/A	N/A
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,000.00	N/A	N/A	N/A
Prepare and or review reimbursement form	\$2,630.00	\$2,500.00	N/A	N/A	N/A

Project management of the transition	\$75,840.00	\$72,000.00	N/A	N/A	N/A
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	N/A	N/A
Comprehensive coverage verification via field study, if needed	\$84,200.00	\$80,000.00	N/A	N/A	N/A
RF Exposure Measurements	\$21,050.00	\$20,000.00	N/A	N/A	N/A
Sub-total	\$228,165.00	\$216,750.00	N/A	\$0.00	N/A
Total for all systems	\$4,283,096.00	\$3,838,033.39	N/A	\$610,306.43	N/A

Other Expenses

Cost Information

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Co Justificati
Other Expenses	\$65,172.00	\$64,612.00		\$0.00	
Develop and air announcement of upcoming channel change	\$5,000.00	\$5,000.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$11,000.00	N/A	N/A	N/A
FCC Filing Fees - Form 2100 license to cover application	\$335.00	\$325.00	N/A	N/A	N/A

Equipment Delivery and Handling Charges	\$5,000.00	\$5,000.00	Expected shipping charges from Gates Air and HVAC contractor. WPXI estimates that there will be additional costs associated with delivery. The transmitter site sits atop a steep hill in an urban area surrounded by narrow, winding roads. Tractor trailer deliveries are not appropriate for the transmitter site. Offloading smaller items into more agile delivery vehicles will avoid the higher costs of road closings and escort services.	N/A	N/A
MVPD Notification of Channel Change	\$5,000.00	\$5,000.00	N/A	N/A	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$38,287.00	\$38,287.00	Cost based on Estimate from GatesAir for decommissioning and removal of the channel 48 transmitters	N/A	N/A
Sub-total	\$65,172.00	\$64,612.00	N/A	\$0.00	N/A
Total for all systems	\$4,283,096.00	\$3,838,033.39	N/A	\$610,306.43	N/A

Cost Information	Grand Total					
		Predetermined Cost Estimate	Estimated Cost	Actual Cost		
	Total for all systems	\$4,283,096.00	\$3,838,033.39	\$610,306.43		

Reimbursem	entestiatus	Response
	The facility has ceased operating on its pre- auction channel.	No
	Construction of final facilities or all necessary modifications are complete.	No
	All receipts for reimbursement have been submitted no further costs are expected to be incurred. Note this will lock the Form 399 from further editing and begin close-out procedures with the Fund Administrator.	No

Certification	Section	Question	Response
	Submission of Estimated Expenses Statements	WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.	
		 The Authorized Person signing below certifies that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. The above-named 	
		entity acknowledges that all certifications and attached documentation are considered material representations.	
		3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.	

- 4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
- 7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.	
I declare, under penalty of perjury, that I am an authorized representative of the above- named applicant for the Authorization(s) specified above.	Otto Lee Schellin , Jr Director of Engineering 09/14/2018

Attachments